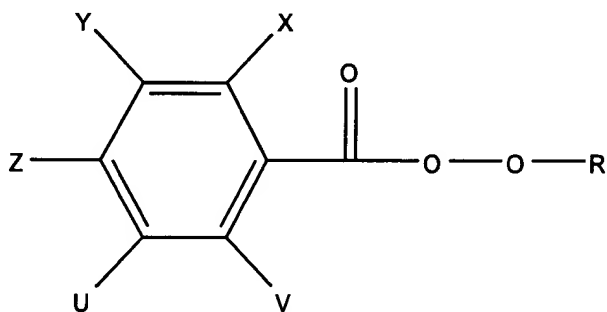
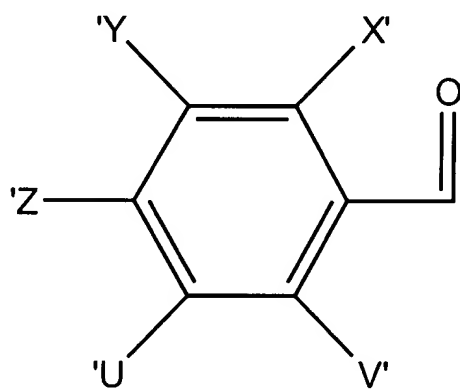


1. (Twice Amended) A process for increasing the melt strength and/or the extensional melt viscosity of a polypropylene (co)polymer, the process comprising melt mixing a polypropylene (co)polymer in the presence of an initiator and optionally a monoene monomer wherein said initiator is selected from the group defined by formula 1:



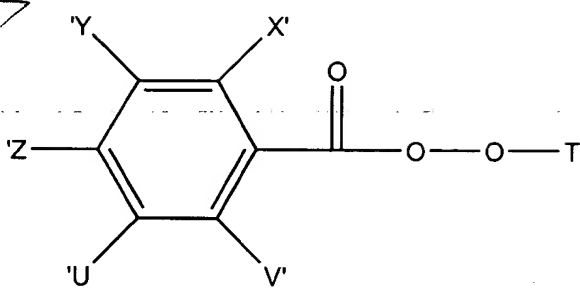
Formula 1

B wherein R is selected from the group consisting of optionally substituted  $\text{C}_1$  to  $\text{C}_{18}$  acyl, optionally substituted  $\text{C}_1$  to  $\text{C}_{18}$  alkyl, aroyl defined by formula 2,



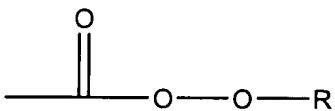
Formula 2

and groups of formula 3,



**Formula 3**

wherein U, V, X, Y, Z, U', V', X', Y' and Z' are independently selected from the group consisting of hydrogen, halogen, C1-C18 alkyl, C1-C18 alkoxy, aryloxy, acyl, acyloxy, aryl, carboxy, alkoxy carbonyl, aryloxy carbonyl, trialkyl silyl, hydroxy, or a moiety of formula 4,

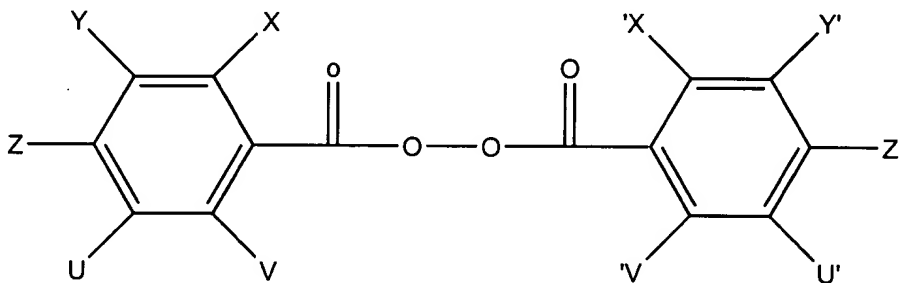


**Formula 4**

and wherein T is alkylene;

wherein the melt strength and/or the extensional melt viscosity of the polypropylene (co)polymer is increased during the melt mixing step.

2. (Amended) The process according to claim 1 wherein the initiator is selected from compounds of formula 6.



## Formula 6

where X, Y, Z, U, V, X', Y', Z', U', V' are independently selected from the group consisting of hydrogen and C<sub>1</sub> - C<sub>18</sub> alkyl where at least one of X, Y, Z, U, V and X', Y', Z', U', V' are not hydrogen.

3. (Amended) The process according to claim 2 wherein the initiator is selected from the group consisting of Dibenzoyl peroxide, o,o'-Bis(methylbenzoyl) peroxide, p,p'-

Bis(methylbenzoyl) peroxide, M,M'-Bis(methylbenzoyl) peroxide, o,m'-Bis(methylbenzoyl) peroxide, o,p'-Bis(methylbenzoyl) peroxide, m,p'-Bis(methylbenzoyl) peroxide,

Bis(ethylbenzoyl) peroxide (all isomers), Bis(propylbenzoyl) peroxide (all isomers),

Bis(butylbenzoyl) peroxide (all isomers), Bis(pentylbenzoyl) peroxide (all isomers),

Bis(hexylbenzoyl) peroxide (all isomers), Bis(heptylbenzoyl) peroxide (all isomers),

Bis(octylbenzoyl) peroxide (all isomers), Bis(nonylbenzoyl) peroxide (all isomers),

Bis(methoxybenzoyl) peroxide (all isomers), Bis(ethoxybenzoyl) peroxide (all isomers),

Bis(propoxybenzoyl) peroxide (all isomers), Bis(butoxybenzoyl) peroxide (all isomers),

Bis(pentoxybenzoyl) peroxide (all isomers), Bis(hexyloxybenzoyl) peroxide (all isomers),

Bis(heptyloxybenzoyl) peroxide (all isomers), Bis(octyloxybenzoyl) peroxide (all isomers),

Bis(nonyloxybenzoyl) peroxide (all isomers), Bis(chlorobenzoyl) peroxide (all isomers),

Bis(fluorobenzoyl) peroxide (all isomers), Bis(bromobenzoyl) peroxide (all isomers),

Bis(dimethylbenzoyl) peroxide (all isomers), Bis(trimethylbenzoyl) peroxide (all isomers),

Bis(tert-butylbenzoyl)peroxide (all isomers), Bis(di-tert-butylbenzoyl)peroxide (all isomers),

Bis(tertbutoxybenzoyl)peroxide (all isomers), Bis(ditrimethylsilylbenzoyl) peroxide (all

isomers), Bis(heptafluoropropylbenzoyl) peroxide (all isomers), Bis(2,6-dimethyl-4-trimethylsilyl benzoyl) peroxide and isomers, 2,2'(dioxydicarbonyl) bis - Benzoic acid dibutyl ester where the term "all isomers" refers to any variation in the position of the ring substituent as well as the structure of the substituent itself.

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4. (Twice Amended) The process according to claim 1 wherein the initiator is selected from the group consisting of tert-butyl perbenzoate, tert-butyl (methyl)perbenzoate (all isomers), tert-butyl (ethyl)perbenzoate (all isomers), tert-butyl (octyl)perbenzoate (all isomers), tert-butyl (nonyl)perbenzoate (all isomers), tert-amyl perbenzoate, tert-amyl (methyl)perbenzoate (all isomers), tert-amyl (ethyl)perbenzoate (all isomers), tert-amyl (octyl)perbenzoate (all isomers), tert-amyl (nonyl)perbenzoate (all isomers), tert-amyl (methoxy)perbenzoate (all isomers), tert-amyl (octyloxy)perbenzoate (all isomers), tert-amyl (nonyloxy)perbenzoate (all isomers), 2-ethylhexyl perbenzoate, 2-ethylhexyl (methyl)perbenzoate (all isomers), 2-ethylhexyl (ethyl)perbenzoate (all isomers), 2-ethylhexyl (octyl)perbenzoate (all isomers), 2-ethylhexyl (nonyl)perbenzoate (all isomers), 2-ethylhexyl (methoxy)perbenzoate (all isomers), 2-ethylhexyl (ethoxy)perbenzoate (all isomers), 2-ethylhexyl (octyloxy)perbenzoate (all isomers), and 2-ethylhexyl (nonyloxy)perbenzoate (all isomers).

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5. (Amended) The process according to claim 1 wherein the initiator is selected from the group consisting of Bis (tertbutylmonoperoxy phthaloyl) diperoxy terephthalate, Bis (tertamylmonoperoxy phthaloyl) diperoxy terephthalate diacetyl phthaloyl diperoxide, dibenzoyl phthaloyl diperoxide, bis(4 methylbenzoyl) phthaloyl diperoxide, diacetyl terephthaloyl di peroxide, dibenzoyl terephthaloyl diperoxide, and Poly[ dioxycarbonyldioxy(1,1,4,4-tetramethyl-

1,4-butanediyl)] peroxide.

6. (Amended) The process according to claim 1 wherein the initiator has a 0.1 hour half life in the range 100 - 170°C.

7. (Amended) The process according to claim 1 wherein the initiator is present in a range of from 0.004 to 0.25 moles of initiator per kg of the polypropylene homopolymer or copolymer.

8. (Amended) The process according to claim 7 wherein the initiator is present in the range of from 0.006 to 0.10 moles of initiator per kg of the polypropylene homopolymer or copolymer.

BT  
9. (Amended) The process according to claim 8 wherein the initiator is present in the range of from 0.01 to 0.05 moles of initiator per kg of the polypropylene homopolymer or copolymer.

10. (Amended) The process according to claim 1 wherein there is no added monoene monomer and the initiator is selected from the group consisting of Dibenzoyl peroxide, o,o'-Bis(methylbenzoyl) peroxide, p,p'-Bis(methylbenzoyl) peroxide, o,o'-Bis(methylbenzoyl) peroxide, o,m'-Bis(methylbenzoyl) peroxide, o,p'-Bis(methylbenzoyl) peroxide, m,p'-Bis(methylbenzoyl) peroxide, Bis(ethylbenzoyl) peroxide (all isomers), Bis(propylbenzoyl) peroxide (all isomers), Bis(butylbenzoyl) peroxide (all isomers), Bis(pentylbenzoyl) peroxide (all isomers), Bis(hexylbenzoyl) peroxide (all isomers), Bis(heptylbenzoyl) peroxide (all isomers), Bis(octylbenzoyl) peroxide (all isomers), Bis(nonylbenzoyl) peroxide (all isomers), Bis(methoxybenzoyl) peroxide (all isomers), Bis(ethoxybenzoyl) peroxide (all isomers),

Bis(propoxybenzoyl) peroxide (all isomers), Bis(butoxybenzoyl) peroxide (all isomers),  
Bis(pentoxybenzoyl) peroxide (all isomers), Bis(hexyloxybenzoyl) peroxide (all isomers),  
Bis(heptyloxybenzoyl) peroxide (all isomers), Bis(octyloxybenzoyl) peroxide (all isomers),  
Bis(nonyloxybenzoyl) peroxide (all isomers), Bis(chlorobenzoyl) peroxide (all isomers),  
Bis(fluorobenzoyl) peroxide (all isomers), Bis(bromobenzoyl) peroxide (all isomers),  
Bis(dimethylbenzoyl) peroxide (all isomers), Bis(trimethylbenzoyl) peroxide (all isomers),  
Bis(tert-butylbenzoyl)peroxide (all isomers), Bis(di-tert-butylbenzoyl)peroxide (all isomers),  
Bis(tert-butoxybenzoyl)peroxide (all isomers), Bis(ditrimethylsilylbenzoyl) peroxide (all  
isomers), Bis(heptafluoropropylbenzoyl) peroxide (all isomers), Bis(2,4-dimethyl-6-  
trimethylsilyl benzoyl) peroxide and isomers tert-amyl perbenzoate, tert-amyl  
(methyl)perbenzoate (all isomers), tert-amyl (ethyl)perbenzoate (all isomers), tert-amyl  
(octyl)perbenzoate (all isomers), tert-amyl (nonyl)perbenzoate (all isomers), tert-amyl  
(methoxy)perbenzoate (all isomers), tert-amyl (octyloxy)perbenzoate (all isomers), tert-amyl  
(nonyloxy)perbenzoate (all isomers), Bis (tert-amylmonoperoxy phthaloyl) diperoxy terephthalate,  
diacetyl phthaloyl diperoxide, dibenzoyl phthaloyl diperoxide, bis(4-methylbenzoyl) phthaloyl  
diperoxide, diacetyl terephthaloyl di peroxide and dibenzoyl terephthaloyl diperoxide.

11. (Twice Amended) The process according to claim 10 wherein the initiator is selected  
from the group consisting of dibenzoyl peroxide, o,o'-Bis(methylbenzoyl) peroxide, p,p'-  
Bis(methylbenzoyl) peroxide, M,M'-Bis(methylbenzoyl) peroxide, o,m'-Bis(methylbenzoyl)  
peroxide, o,p'-Bis(methylbenzoyl) peroxide, and m,p'-Bis(methylbenzoyl) peroxide.

12. (Amended) The process according to claim 1 wherein the initiator is used in combination

with a monoene monomer.

13. (Amended) The process according to claim 12 wherein the amount of monoene monomer is up to 5 times the total moles of initiator.

14. (Amended) The process according to claim 12 wherein the monoene monomer is styrene.

15. (Twice Amended) The process according to claim 12 wherein the initiator is selected from the group consisting of Dibenzoyl peroxide, o,o'-Bis(methylbenzoyl) peroxide, p,p'-Bis(methylbenzoyl) peroxide, M,M'-Bis(methylbenzoyl) peroxide, o,m'-Bis(methylbenzoyl) peroxide, o,p'-Bis(methylbenzoyl) peroxide, m,p'-Bis(methylbenzoyl) peroxide, Bis(ethylbenzoyl) peroxide (all isomers), Bis(propylbenzoyl) peroxide (all isomers), Bis(butylbenzoyl) peroxide (all isomers), Bis(pentylbenzoyl) peroxide (all isomers), Bis(hexylbenzoyl) peroxide (all isomers), Bis(heptylbenzoyl) peroxide (all isomers), Bis(octylbenzoyl) peroxide (all isomers), Bis(nonylbenzoyl) peroxide (all isomers), Bis(methoxybenzoyl) peroxide (all isomers), Bis(ethoxybenzoyl) peroxide (all isomers), Bis(propoxybenzoyl) peroxide (all isomers), Bis(butoxybenzoyl) peroxide (all isomers), Bis(pentoxylbenzoyl) peroxide (all isomers), Bis(hexyloxybenzoyl) peroxide (all isomers), Bis(heptyloxybenzoyl) peroxide (all isomers), Bis(octyloxybenzoyl) peroxide (all isomers), Bis(nonyloxybenzoyl) peroxide (all isomers), Bis(chlorobenzoyl) peroxide (all isomers), Bis(fluorobenzoyl) peroxide (all isomers), Bis(bromobenzoyl) peroxide (all isomers), Bis(dimethylbenzoyl) peroxide (all isomers), Bis(trimethylbenzoyl) peroxide (all isomers), Bis(tert-butylbenzoyl)peroxide (all isomers), Bis(di-tert-butylbenzoyl)peroxide (all isomers),

Bis(tert-butoxybenzoyl)peroxide (all isomers), Bis(ditrimethylsilylbenzoyl) peroxide (all isomers), Bis(heptafluoropropylbenzoyl) peroxide (all isomers), Bis(2,4-dimethyl-6-trimethylsilyl benzoyl) peroxide and isomers, 2,2'(dioxycarbonyl) bis - Benzoic acid dibutyl ester, tert-butyl perbenzoate, tert-butyl (methyl)perbenzoate (all isomers), tert-butyl (ethyl)perbenzoate (all isomers), tert-butyl (octyl)perbenzoate (all isomers), tert-butyl (nonyl)perbenzoate (all isomers), tert-amyl perbenzoate, tert-amyl (methyl)perbenzoate (all isomers), tert-amyl (ethyl)perbenzoate (all isomers), tert-amyl (octyl)perbenzoate (all isomers), tert-amyl (nonyl)perbenzoate (all isomers), tert-amyl (methoxy)perbenzoate (all isomers), tert-amyl (octyloxy)perbenzoate (all isomers), tert-amyl (nonyloxy)perbenzoate (all isomers), 2-ethylhexyl perbenzoate, 2-ethylhexyl (methyl)perbenzoate (all isomers), 2-ethylhexyl (ethyl)perbenzoate (all isomers), 2-ethylhexyl (octyl)perbenzoate (all isomers), 2-ethylhexyl (nonyl)perbenzoate (all isomers), 2-ethylhexyl (methoxy)perbenzoate (all isomers), 2-ethylhexyl (ethoxy)perbenzoate (all isomers), 2-ethylhexyl (octyloxy)perbenzoate (all isomers), 2-ethylhexyl (nonyloxy)perbenzoate (all isomers), Bis (tertbutylmonoperoxy phthaloyl) diperoxy terephthalate, Bis (tertamylmonoperoxy phthaloyl) diperoxy terephthalate diacetyl phthaloyl diperoxide, dibenzoyl phthaloyl diperoxide, bis(4 methylbenzoyl) phthaloyl diperoxide, diacetyl terephthaloyl di peroxide, dibenzoyl terephthaloyl diperoxide and Poly[dioxycarbonyldioxy(1,1,4,4-tetramethyl-1,4-butanediyl)] peroxide--

### REMARKS

Claims 1-20 are pending in this application. At the outset, Applicants wish to thank the Examiner for indicating that claim 20 is allowed and that claim 15 would be allowable if